

Rosh.

Work Order ID 155959

155959

Page 1

Wednesday, January 18, 2017 2:42:57 PM

Item ID: D2327-1

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Spacer Bushing

Start Date: 1/18/2017 Start Qty: 40.00

40

Cust Item ID:

Required Date: 1/23/2017 Req'd Qty: 40.00

40

Customer:

Reference:

Approvals: Process Plan:

Date: JAN 18 2017

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D2327

Rev D

100

0.00

100

Hardinge CNC LATHE SMALL

Hardinge

Memo

0.20

Hardinge CNC Lathe Small

Turn per Folio FA232 and Dwg D2327 Deburr BOTH ENDS

43

Ø

DAS
44
9-89

17-01-10

110

0.00

110

QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.07

Quality Control

43

Ø

DAS
44
9-89

17-01-19

120

0.00

120

QC8- Inspect parts - second check

QC

Memo

0.13

Quality Control

17-1-20

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only

Work Order: _____		DISPOSITION		AGAINST DEPARTMENT/PROCESS					
Part No. _____		Rework ☐		Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐		
NCR No. _____		Scrap ☐		Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐		
		Use-as-is ☐		Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐		
		Suspected Unapproved ☐		Large Fab ☐	Composite ☐	Supplier ☐			
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval		
Description Work Order Deviation				Disposition			Completed By		
							Lead hand / Supervisor Approval Verification		
							QC / QA Coordinator Approval		
Root Cause				FAULT CATEGORY					
Environment ☐	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong				
Design ☐	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions				
Doc/Data ☐	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance				
Equip/Tooling ☐	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect				
Handling/Pre ☐	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing				
Material ☐	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved				
Internal Transport ☐	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing				
Tribal Knowledge ☐	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish				
LOA ☐	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread				
Substation ☐	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence				
Past Expiry Date ☐	☐ Manufacturing Process								
Misidentified ☐	☐ Past Due	OTHER :							

Work Order ID 155959

Wednesday, January 18, 2017 2:42:57 PM

155959

Page 2

Item ID: D2327-1**Accept*****N900040100*****Setup Start*****NS1*****Revision ID:****Stop*****NS2*****Item Name:** Spacer Bushing**Start Date:** 1/18/2017 **Start Qty:** 40.00***40*****Cust Item ID:****Required Date:** 1/23/2017 **Req'd Qty:** 40.00***40*****Customer:****Reference:****Approvals:****Process Plan:** _____**Date:** _____**Tooling:** _____**Date:** _____**Run Start*****NR1*****QC:** _____**Date:** _____**SPC (Y/N):** _____**Date:** _____**Stop*****NR2*****Sequence ID/
Work Center ID****Operation
Description****Set Up/
Run Hours****Tool ID****Tool #****Plan
Code****Accept
Qty****Reject
Qty****Reject
Number****Insp.
Stamp**

130

Identify as per dwg & Stock Location: _____

0.00

130

Packaging

Packaging

Memo

*****STOCK IN BASKET CELL*****

LOCATION : WA004

0.07

43

DAS
6
9-89

JAN 24 2017

140

QC21- Final Inspection - Work Order Release

0.00

140

QC

Quality Control

Memo

0.67

DAS
21
9-89

JAN 26 2017



JAN 24 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
				Completed By					
				Lead hand / Supervisor Approval Verification					
				QC / QA Coordinator Approval					

Root Cause				FAULT CATEGORY			
Environment ☐	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong		
Design ☐	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions		
Doc/Data ☐	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance		
Equip/Tooling ☐	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect		
Handling/Pre ☐	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing		
Material ☐	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved		
Internal Transport ☐	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing		
Tribal Knowledge ☐	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish		
LOA ☐	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread		
Substation ☐	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence		
Past Expiry Date ☐	☐ Manufacturing Process	OTHER : _____					
Misidentified ☐	☐ Past Due						

Picklist Print

Wednesday, January 18, 2017 2:43:02 PM

Page 1

Work Order ID: 155959

155959

Parent Item: D2327-1

D2327-1

Parent Item Name: Spacer Bushing

Start Date: 1/18/2017

Required Date: 1/23/2017

Start Qty: 40.00

Required Qty: 40.00

Comments: IPP D05.11.02Removed 303 SSKJ/EC
IPP Rev:E Removed 303SS JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304R0.375		Purchased	No			100	f	7.8120	0.1771	7.456842	DAS 44 9-89	17-01-19.	
M304R0 375									**				
304 ROUND BAR 0.375													

Location

Loc Qty

Loc Code

MAT029

7.812

m136200

5.437

m136568

2.375

5.437'
2.375'

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

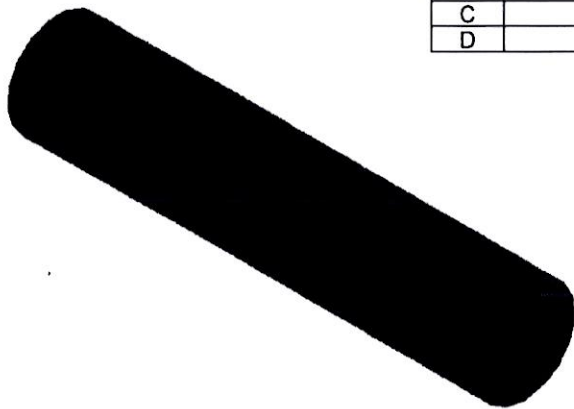
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
2-A0 2-A 2-B-C									
							Completed By		
							Lead hand / Supervisor Approval Verification		
							QC / QA Coordinator Approval		

Root Cause				FAULT CATEGORY			
Environment ☐		No Re-verification ☐		Pressure/Forced ☐		Temperature/Cure ☐	
Design ☐		Operator ☐		Bending ☐		Set-up ☐	
Doc/Data ☐		Offset/Setup ☐		Centre Not Concentric ☐		BOM/Route ☐	
Equip/Tooling ☐		Supplier ☐		Cracks ☐		Broken/Damage/Defect ☐	
Handling/Pre ☐		Training ☐		Crimp/Kink/Ripple/Wave ☐		Inspection Incomplete/Unqualified ☐	
Material ☐		Use for Testing ☐		Cuffs ☐		Contamination ☐	
Internal Transport ☐		Poor Information ☐		Crushing ☐		Countersink ☐	
Tribal Knowledge ☐		Rushing ☐		Heat Treat ☐		Cut Too Short ☐	
LOA ☐		Product Improvement ☐		Wave/Twist in Tube ☐		Instructions Incomplete/Unclear ☐	
Substation ☐		Process Improvement ☐		Marks/Chatter ☐		Drill Holes ☐	
Past Expiry Date ☐		Manufacturing Process ☐		OTHER : _____			
Misidentified ☐		Past Due ☐					

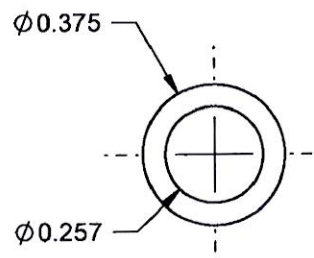
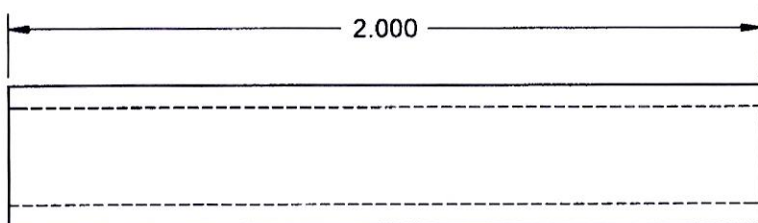


DESIGN BW	DRAWN BY CB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED LE	APPROVED H	DRAWING NO. D2327	REV. 1 SHEET 1 OF 1
DATE 06.10.12		TITLE SPACER BUSHING	SCALE 2:1
REV	DATE	DESCRIPTION	
A	94.12.17	NEW ISSUE	
B	95.12.06	LENGTH CHANGE	
C	03.05.13	303 SS SPEC ADDED	
D	06.10.12	REMOVE 303 SS MATERIAL	

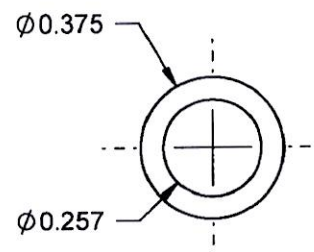
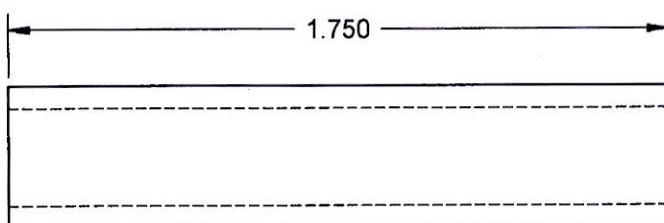


SHOP COPY
RETURN TO
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SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 15595811
JAN 18 2017

RELEASED
06.11.14



D2327-1 SPACER BUSHING



D2327-3 SPACER BUSHING

NOTES:

- 1) MATERIAL: AISI 304/316 SS, $\phi 0.375$, 0.065 WALL SEAMLESS ROUND TUBING
(REF. DART SPEC M304TR0.375W.065)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP CORNERS TO 0.010 MAX



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